

Fraser-Johnston

28b
FR

Completely Automatic

AIR CONDITIONING GAS FURNACES

One of the largest air conditioning manufacturers in the West, Fraser & Johnston Co. offers you the most advanced line of air conditioning gas furnaces on the market — **die-pressed — precision built — completely welded.**

This latest line incorporates revolutionary refinements of heating design, and all of the units are finished in attractive golden tan textured tone enamel. Fraser-Johnston furnaces not only **look** like top quality but **are** top quality. Distributed nationally for more than 25 years, Fraser-Johnston furnaces have been operating under every conceivable condition—more than 90 per cent are still in operation.

FOR CLEAN CAREFREE COMFORT

Patented, silent, lint-free, multi-slotted burners and generous streamlined steel heating surfaces wring all possible heat from the burned gas. Inexpensive, removable filters catch dirt, pollen and germs. The extra large, quiet centrifugal blowers deliver the warmed air where it is needed. A room thermostat automatically controls heat delivery—gives you the temperature you desire for maximum comfort in every room. Fraser-Johnston furnaces come completely wired and assembled — approved for reduced clearance — and are American Gas Association approved. All parts are accessible from the front for easy maintenance.



MODEL C-CD

Fraser-Johnston

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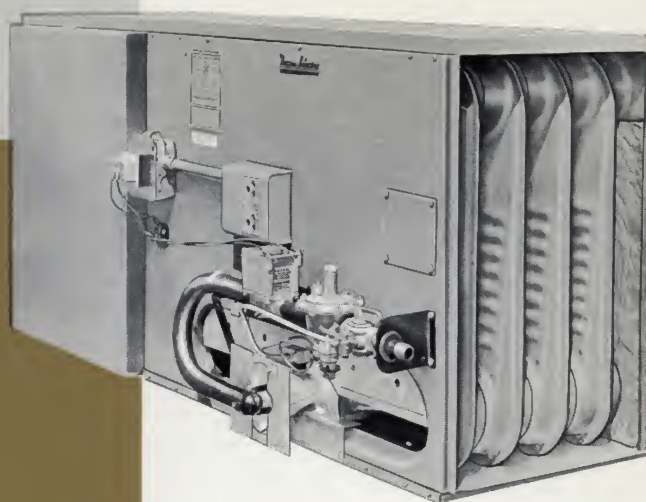


MODEL C-CD

MODELS HN — HND

HORIZONTAL—AIR CONDITIONING GAS FURNACES

Fraser-Johnston HN-HND horizontal gas furnaces are designed and engineered for space conservation and heating efficiency. Homes with no basement or other suitable location for an upright furnace still may have full time air conditioning. Only the shape is changed—top quality features for safety, efficiency, beauty and trouble-free long life remain. Attractively finished in golden tan — die-pressed — precision built — completely welded. Especially designed for installation in homes without basements—for attics—under floors—suspension in service porches—stores—industrial plants. Efficient—compact—accessible.



MODELS HN AND HND

NATURAL, MANUFACTURER AND L. P. GASES

Model No.	BTU/Hr. Input	CFM		H.P. Motor	CASING DIM.			Vent Size	Ship. Wt.
		75° Rise	100° Rise		Wdth.	Ht.	Lgth.		
70 HND	70,000	700	525	1/10	12 1/4	25	54 1/2	4"	185
75 HND	75,000	750	560	1/10	12 1/4	25	54 1/2	4"	185
80 HND	80,000	800	600	1/10	12 1/4	25	54 1/2	4"	185
100 HND	100,000	1000	750	1/8	15 3/4	25	54 1/2	5"	207
80 HN†	80,000	800	600	1/6	15 3/4	25	54 1/2	5"	250
100 HN†	100,000	1000	750	1/6	12 1/4	25	54 1/2	4"	218
125 HN†	125,000	1250	940	1/4	19 1/4	25	54 1/2	6"	290
150 HN†	150,000	1500	1125	1/3	22 3/4	25	54 1/2	7"	315

Output is 80% of Input. †All H Nbelt driven furnaces, when equipped with proper motor and blower pulleys, A.G. high-static approval 0.6" W.C. external static pressure.



THE BEST ENGINEERED FURNACE ON THE MARKET

MODEL R (Belt Drive) MODEL RD (Direct Drive)

DOWN-FLOW AIR CONDITIONING FURNACES

Designed for installation where it is desired to deliver air below floor level. Ideal for perimeter heating. Incorporates quality features of C and CD models, using same heat exchanger, burners, blowers, etc.

NATURAL AND L.P. GASES

Size	BTU/Hr. Input	CFM for		Motor h.p.	CASING DIM.			Vent. Size	Ship. Wt.
		75° Rise	100° Rise		Ht.	Wdth.	Dpth.		
*60R315	60,000	600	450	1/6	54	15 1/8	27 3/4	4"	170
*80R315	80,000	800	600	1/6	54	15 1/8	27 3/4	4"	170
*90R415	90,000	900	675	1/6	54	15 1/8	27 3/4	5"	188
*100R415	100,000	1000	750	1/6	54	15 1/8	27 3/4	5"	188
*100R421	100,000	1000	750	1/6	54	21 1/8	27 3/4	5"	200
*125R521	125,000	1250	940	1/4	54	21 1/8	27 3/4	6"	223
*150R621	150,000	1500	1125	1/3	54	21 1/8	27 3/4	6"	247
*175R727	175,000	1750	1310	1/2	54	27 1/8	27 3/4	7"	295
*200R827	200,000	2000	1500	3/4	54	27 1/8	27 3/4	7"	308
*200R1033	200,000	2000	1500	3/4	54	33 1/8	27 3/4	8"	370
*250R1033	250,000	2500	1875	3/4	54	33 1/8	27 3/4	8"	370
65RD312	65,000	650	490	1/6	54	12 1/8	27 3/4	4"	150
70RD312	70,000	700	525	1/6	54	12 1/8	27 3/4	4"	150
75RD312	75,000	750	560	1/6	54	12 1/8	27 3/4	4"	150
80RD312	80,000	800	600	1/6	54	12 1/8	27 3/4	4"	150
70RD315	70,000	700	525	1/6	54	15 1/8	27 3/4	4"	165
75RD315	75,000	750	560	1/6	54	15 1/8	27 3/4	4"	165
80RD315	80,000	800	600	1/6	54	15 1/8	27 3/4	4"	165
90RD415	90,000	900	675	1/6	54	15 1/8	27 3/4	5"	178
100RD415	100,000	1000	750	1/6	54	15 1/8	27 3/4	5"	178
125RD521	125,000	1250	940	1/4	54	21 1/8	27 3/4	6"	210

Output is 80% of input—Reduced clearances approved. * All belt drive furnaces, when equipped with proper motor and blower pulley are AGA approved for 0.6" W.C. external static pressure.



MODEL R



MODEL RD

DESIGN FEATURES

Updraft Heat Exchanger — Die-pressed — completely welded—no moisture pockets. Most efficient, quiet, uniform airflow pattern.

Blowers—Slide out like a drawer for service.

Burners—Multi-slot, lint proof—quiet.

Safe—A.G.A. approved.

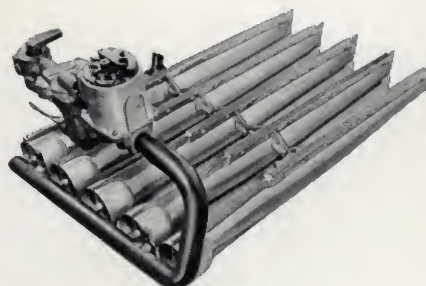
Compact—Require minimum floor space.

Attractive Casing — Finished in golden tan. Blends with any color.

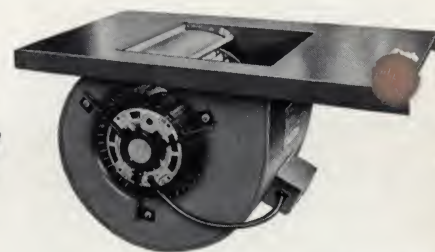
Assembled—Completely wired and assembled — heating — heating and cooling — heating, cooling and ventilation, etc.

Quality Controlled—All units checked—double checked—fire-tested at the factory.

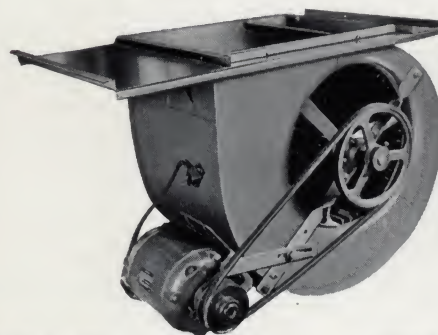
Service Man's Dream—All internal parts, including heat exchanger, easily removable from front without disturbing the installation.



**Burner Manifold Assembly
Model 125**



Direct Drive Blower Assembly

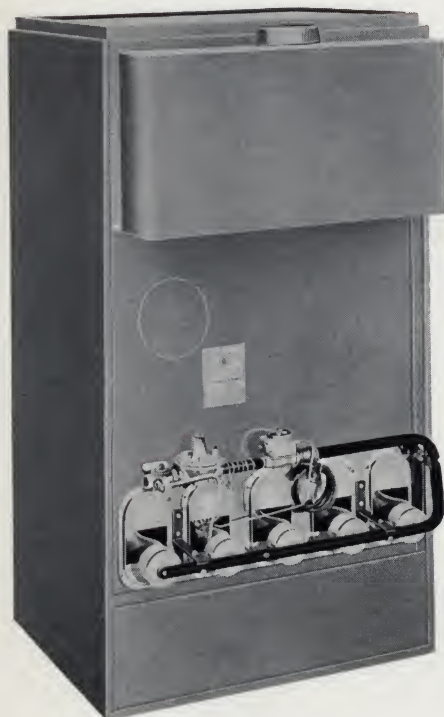


Belt Drive Blower Assembly



**Heating Element
Models R, C**

MODEL GP



MODEL GP

GRAVITY MODEL

PRESSED STEEL CONSTRUCTION

Using a continuous weld and die pressed steel parts, Fraser-Johnston Model GP furnaces have an 8" built-in supply plenum which can accommodate 8" vertical outlets or outlets from the top of the furnace. Similar in design to the forced air furnaces but using larger sections and burners, the Model GP gives you quality at lowest cost.

SPECIFICATIONS—GRAVITY GAS FURNACES NATURAL AND MANUFACTURED GASES

Model No.	BTU/Hr. Input	CASING DIM.			Vent Size	Ship. Wt.
		Wdth.	Ht.	Dpth.		
60 GP	60,000	20"	60"	24"	4"	185
80 GP	80,000	26"	60"	24"	5"	220
100 GP	100,000	32"	60"	24"	5"	265
120 GP	120,000	38"	60"	24"	5"	320

Note: Output is 75% of input.

Fraser-Johnston

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OVER A QUARTER CENTURY LEADERSHIP

AIR CONDITIONING EVAPORATORS

FOR ALL-YEAR AIR CONDITIONING

28b
FR

The first cooling and dehumidifying coils in the industry designed especially for use with residential or commercial air conditioning systems. When installed in your new or present warm-air system, little resistance is imposed on furnace fan. An exclusive feature eliminates humidity build-up during the off-cycle of the condensing unit. All moisture removed from the air is immediately drained from the air-stream. Even the air-flow across the coil accelerates the condensate removal. Costly labor is eliminated in applying our coils to our furnaces—low resistance to air flow makes them usable where other coils are not. A.R.I. rated when used with the proper Fraser-Johnston condensing unit.

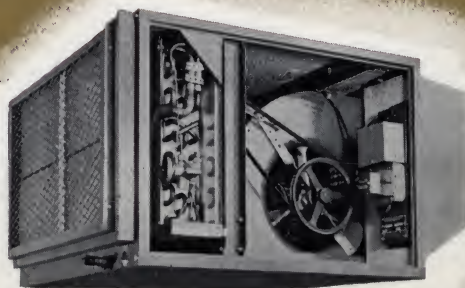
MODEL C
Furnace and Coil—
the ever-popular
upflow type.



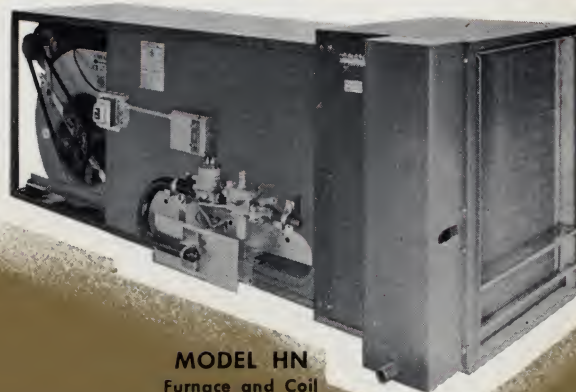
MODEL R
Furnace and Coil
for downflow
or perimeter systems.



THE BEST ENGINEERED ALL-YEAR AIR CONDITIONING FURNACES ON THE MARKET



MODEL HB
Air-handling unit to be installed
independently of the heating system.
For use in space or with duct systems.



MODEL HN
Furnace and Coil
for horizontal application.

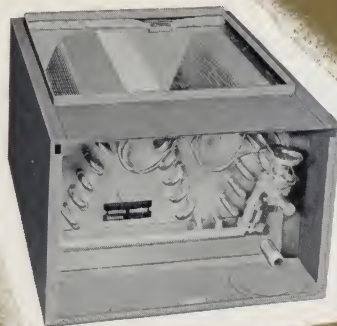
Manufactured by
FRASER-JOHNSTON CO.
SAN FRANCISCO, CALIF.



AIR CONDITIONING EVAPORATORS



21C3
for upflow furnaces



21R3
for downflow furnaces



4H33
for horizontal furnaces

Evaporator assembly slides out for easy access. Static pressure across a wet coil C and R units .14" WC; H units .16" WC. Outer casing finished in golden tan enamel to match furnace. Removable front panel gives complete access to expansion valve and evaporator assembly. Rust-resistant construction throughout. Fiberglass insulated. Transition provided where necessary to connect to our furnaces. See engineering sheet for performance data. Specify refrigerant.

SPECIFICATIONS

Size	Tons	CASING DIMENSIONS Ht.	Width	Depth	Inlet Opening	Discharge Opening	Companion to Furnace Size	Ship. Wt.
15C2	2	13	15 $\frac{1}{8}$	21 $\frac{3}{4}$	13 $\frac{3}{4}$ x 20	13 $\frac{3}{4}$ x 19	70 & 80CD315, 60 & 80C315, 90 & 100C415	55
21C3	3	13	21 $\frac{1}{8}$	21 $\frac{3}{4}$	19 $\frac{3}{4}$ x 20	19 $\frac{3}{4}$ x 19	100C421, 125C521, 150C621	70
21C4	4	20	27 $\frac{1}{8}$	21 $\frac{3}{4}$	19 $\frac{3}{4}$ x 20	25 $\frac{3}{4}$ x 19	100C421, 125C521, 150C621	85
27C4	4	13	27 $\frac{1}{8}$	21 $\frac{3}{4}$	25 $\frac{3}{4}$ x 20	25 $\frac{3}{4}$ x 19	175C727, 200C827	90
27C5	5	20	33 $\frac{1}{8}$	21 $\frac{3}{4}$	25 $\frac{3}{4}$ x 20	31 $\frac{3}{4}$ x 19	175C727, 200C827	100
15R2	2	13 $\frac{3}{8}$	15 $\frac{1}{8}$	27 $\frac{3}{4}$	13 x 19 $\frac{1}{2}$	13 x 20	80, 90, & 100RD415; 80, 90, & 100R415	60
18R3	3	20	21 $\frac{1}{8}$	27 $\frac{3}{4}$	16 x 19 $\frac{1}{2}$	19 x 20	100 & 125R518	75
21R3	3	13 $\frac{3}{8}$	21 $\frac{1}{8}$	27 $\frac{3}{4}$	19 x 19 $\frac{1}{2}$	19 x 20	150R621	75
21R4	4	20	27 $\frac{1}{8}$	27 $\frac{3}{4}$	19 x 19 $\frac{1}{2}$	25 x 20	150R621	90
24R4	4	20	27 $\frac{1}{8}$	27 $\frac{3}{4}$	22 x 19 $\frac{1}{2}$	25 x 20	140 & 175R724	95
27R4	4	13 $\frac{3}{8}$	27 $\frac{1}{8}$	27 $\frac{3}{4}$	25 x 19 $\frac{1}{2}$	25 x 20	200R827	100
27R5	5	20	33 $\frac{1}{8}$	27 $\frac{3}{4}$	25 x 19 $\frac{1}{2}$	31 x 20	200R827	105
3H22	2	26 $\frac{3}{8}$	16 $\frac{1}{4}$	16	15 $\frac{3}{8}$ x 24	14 $\frac{1}{4}$ x 24 $\frac{3}{4}$	80HN	65
4H22	2	26 $\frac{3}{8}$	16 $\frac{1}{4}$	16	15 $\frac{3}{8}$ x 24	14 $\frac{1}{4}$ x 24 $\frac{3}{4}$	100HN	67
4H33	3	26 $\frac{3}{8}$	22 $\frac{3}{4}$	16	22 $\frac{3}{4}$ x 24	20 $\frac{3}{4}$ x 24 $\frac{3}{4}$	100HN	76
5H33	3	26 $\frac{3}{8}$	22 $\frac{3}{4}$	16	22 $\frac{3}{4}$ x 24	20 $\frac{3}{4}$ x 24 $\frac{3}{4}$	125HN	83
6H33	3	26 $\frac{3}{8}$	22 $\frac{3}{4}$	16	22 $\frac{3}{4}$ x 24	20 $\frac{3}{4}$ x 24 $\frac{3}{4}$	150HN	84
4H44	4	26 $\frac{3}{8}$	29 $\frac{3}{4}$	16	29 $\frac{3}{4}$ x 24	27 $\frac{3}{4}$ x 24 $\frac{3}{4}$	100HN	100
5H44	4	26 $\frac{3}{8}$	29 $\frac{3}{4}$	16	29 $\frac{3}{4}$ x 24	27 $\frac{3}{4}$ x 24 $\frac{3}{4}$	125HN	105
6H44	4	26 $\frac{3}{8}$	29 $\frac{3}{4}$	16	29 $\frac{3}{4}$ x 24	27 $\frac{3}{4}$ x 24 $\frac{3}{4}$	150HN	108
5H55	5	26 $\frac{3}{8}$	36 $\frac{1}{4}$	16	36 $\frac{1}{4}$ x 24	34 $\frac{1}{4}$ x 24 $\frac{3}{4}$	125HN	115
6H55	5	26 $\frac{3}{8}$	36 $\frac{1}{4}$	16	36 $\frac{1}{4}$ x 24	34 $\frac{1}{4}$ x 24 $\frac{3}{4}$	150HN	120

SPECIFICATIONS—AIR HANDLING UNITS, EVAPORATOR & BLOWER PACKAGE

Size	Nom. H.P.	CASING DIM. Ht. Width L.	Inlet Opening H x W	Discharge Opening H x W	Max. C.F.M.	Motor H.P.	Ship. Wt.
HB22	2	22 $\frac{1}{2}$ 25 32	18 x 18 $\frac{1}{4}$	15 x 12 $\frac{1}{2}$	900	$\frac{1}{8}$	138
HB33	3	22 $\frac{1}{2}$ 34 32	18 x 29 $\frac{3}{8}$	15 x 15 $\frac{1}{2}$	1350	$\frac{1}{4}$	160
HB44	4	22 $\frac{1}{2}$ 42 32	18 x 37 $\frac{3}{8}$	15 x 15 $\frac{1}{2}$	1800	$\frac{1}{2}$	208
HB55	5	22 $\frac{1}{2}$ 51 32	18 x 47 $\frac{3}{8}$	15 x 35 $\frac{1}{2}$	2250	$\frac{3}{4}$	270
HB80	7 $\frac{1}{2}$	42 $\frac{3}{4}$ 40 40	38 $\frac{1}{4}$ x 30 $\frac{1}{4}$	18 $\frac{3}{4}$ x 19	3400	$\frac{3}{4}$	580
HB110	10	42 $\frac{3}{4}$ 52 40	38 $\frac{1}{4}$ x 48 $\frac{1}{4}$	20 $\frac{3}{4}$ x 18 $\frac{3}{4}$	4500	1	632
HB165	15	42 $\frac{3}{4}$ 76 40	38 $\frac{1}{4}$ x 72 $\frac{1}{4}$	20 $\frac{3}{4}$ x 23 $\frac{1}{4}$	6750	1 $\frac{1}{2}$	705

Manufactured by

Fraser-Johnston

San Francisco, California

Fraser-Johnston

OVER A QUARTER CENTURY LEADERSHIP

AIR COOLED CONDENSING UNITS

28b
FR



To meet the ever-expanding use of Air-Cooled Condensing Units, **Fraser-Johnston** offers three complete lines. The A17 and the F units are designed to operate in high ambient temperatures. The E units are designed for moderate ambients. All have large slow speed fans for amazingly quiet operation. The F series and the E series use the increasingly popular vertical discharge propeller type fan for cooling the condenser. The A17 series, second to none,

utilizes oversize, centrifugal blowers. The user has a choice to suit his particular requirements. Each type will give years of trouble-free economical comfort.

These modern Condensing Units are weatherproof — equipped for outdoor use. Enclosed controls, compressors and motors are fully housed in an enclosure which is ventilated with air at outside ambient temperatures. **A.R.I.** rated when used with proper Fraser-Johnston evaporator.



1A17



35F and 33E

Refrigerant R22 — all models. All models — 230V., single phase 60 cycle or 208/220V., 3-phase AC except 1A17. Units shipped with holding charge only except 1A17 which is charged. Model 1A17 available in single phase only.

COMPARE THESE QUALITY FEATURES

- High-low pressure switch
- Built-in thermal overload
- Fusible plug—melts at 210° F.
- Built-in contactor
- Electrical panel—all internal wiring complete 24-V pilot circuit
- Sight glass and drier
- Delay type positive contact start and stop
- Protected against slugging
- Serviceable while in operation
- Trouble-free—all units tested under full refrigeration load
- Large fans and condensers for low cost operation
- Five year warranty on compressor
- All models listed and approved by Underwriters Laboratories, Inc.

THE BEST ENGINEERED AIR COOLED CONDENSING UNITS ON THE MARKET

SPECIFICATIONS—AIR COOLED CONDENSING UNITS

Size	Nom. H.P.	Casing Dim.			Blower or Fan			Total Full Load		Max. Fuse Size	Liquid Line	Suction Line ODs	Pump Down Cap.	Coil Face Area	CFM Air Vol.	Ship. Wt.
		Ht.	Wdth.	Depth	No.	Size	HP/Fan	Amps 1-phase	Amps 3-phase							
22E	2	28½	32	30	1	18	⅛	14.1	11.4	50	¾FI	¾SW	12	3.4	1700	315
33E	3	28½	32	30	1	18	¼	23.2	17.4	60	¾FI	¾SW	12	5.1	2500	360
40E	3½	34½	37	30	1	24	⅓	22.7	No	60	¾FI	¾SW	12	6	3000	450
47E	4	34½	37	30	1	24	½	34.6	24.0	90	½FI	1½SW	18	6.7	3400	500
23F	2	28½	32	30	1	20	⅛	14.1	11.4	50	¾FI	¾SW	12	3.4	2400	315
35F	3	28½	40	32	1	24	¼	23.2	17.4	60	¾FI	¾SW	12	5.8	3600	390
42F	3½	34½	37	30	1	24	⅓	22.7	No	60	¾FI	¾SW	12	6.7	4200	480
48F	4	34½	46	32	1	24	½	34.6	24.0	90	½FI	1½SW	18	8.3	4800	550
58F	5	42¾	45	40	1	30	¾	45.5	34.4	100	½FI	1½SW	18	10	6000	775
86F	7½	42¾	67	40	1	30	1	No	37.1	100	¾FI	1½SW	25	15	9000	1000
112F	10	42¾	92	40	2	30	¾	No	49.7	125	¾FI	1½SW	30	20	12000	1310
193F	15	42¾	141	40	3	30	1	No	81.3	200	¾SW	2½SW	40	30	18000	1700
1A17	1	17	26	26	1	9 x 7	⅛	6.5	No	20	¾FI	¾FI	5	2	1200	240
2A17	2	22	32	37	1	13x12	¼	14.8	12.1	50	¾FI	¾SW	12	4	2400	410
3A17	3	30	36	42	1	16x16	⅓	23.7	17.9	60	¾FI	¾SW	12	6	3600	540
4A17	4	34	38	48	1	16x20	½	34.6	24.0	90	½FI	1½SW	18	8	4800	760
5A17	5	34	42	48	1	20x20	½	43.8	32.7	100	½FI	1½SW	18	10	6000	820

Manufactured by
FRASER-JOHNSTON CO.
SAN FRANCISCO, CALIF.



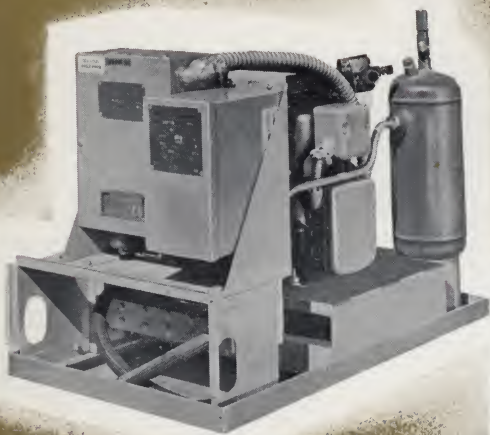
Fraser-Johnston

OVER A QUARTER CENTURY LEADERSHIP

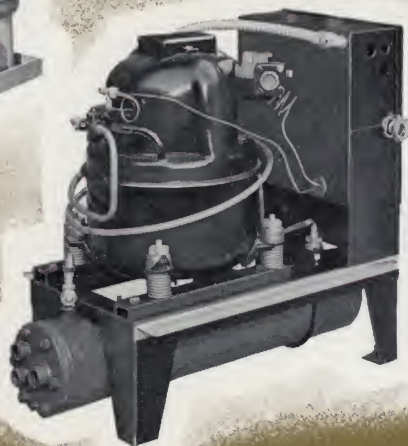
WATER COOLED CONDENSING UNITS



Water Cooled Condensing Units operating on city water or water towers offer many advantages in certain areas. They are not affected by extreme conditions of temperature provided the water tower or water-saving device is properly maintained and provision is made to overcome unfavorable water conditions. Be sure to consult with your installer for his recommendations pertaining to your locality.



3W13
without enclosure



5W14
without enclosure



MODEL W
with enclosure

SPECIFICATIONS WATER COOLED CONDENSING UNITS

Size	Liquid Line Flare	Suction Line ODs	Pump Down Cap. Lbs.	Comp. H.P.	AMPERES		WATER		CASING DIM.			Ship. Wt.
					1-phase	3-phase	In	Out	Ht.	Dpth. includes cover	Wdth.	
2W13	3/8	7/8	12	2	12.6	9.9	1/2	1/2	23	18	28	265
3W13	3/8	7/8	12	3	21.0	15.2	1/2	1/2	23	18	28	265
4W14	1/2	1 1/8	18	4	31.9	21.3	3/4	3/4	28 1/4	18	34	400
5W14	1/2	1 1/8	18	5	39.9	28.8	3/4	3/4	28 1/4	18	34	407

All models—230V., single phase 60 cycle or 208/220V., 3-phase AC.

Controls—High and low pressure switch. Built-in thermal overload.

Electrical panel—All internal wiring complete. 24 volt pilot circuit. Built-in Contactor all models 1- and 3-phase.

Units shipped with Refrigerant 22, holding charge only.

Five-year Warranty on compressors.

Water valve—not included.

Sight glass and drier.

Protected against slugging.

Time delay start and stop.

All models listed and approved by Underwriters Laboratories, Inc., for indoor or outdoor installation.

All models use Refrigerant 22.

Fusible plug—melts at 210° F.



A complete line of Water Cooled Condensing Units for Air Conditioning. Compressor is Hermetic type, sealed for long life. Enclosure suitable for indoor or outdoor use. Access to refrigerant lines and wiring is independent of cover and is weatherproofed. Units are suitable for pressure or water-tower operation.

Fraser-Johnston

Fraser-Johnston

OVER A QUARTER CENTURY LEADERSHIP

THE ULTIMATE FURNACE WITH BUILT-IN EVAPORATOR

28b
FR

FOR ALL-YEAR
AIR CONDITIONING

MODELS CA & RA

FOR USE WITH REMOTE CONDENSER



Certification applies only when used with proper components as designated by manufacturer.

In models CA and RA Fraser-Johnston offers the ultimate in upflow and downflow furnaces with built-in evaporator coils, designed specifically for heating and cooling operation. Combining the superior qualities of the heating furnaces with larger casings the outstanding features of the Fraser-Johnston evaporators and the greater air handling capacity of large diameter centrifugal blowers, the CA and RA units not only offer quiet efficient performance but also a wide variety of heating and cooling applications.

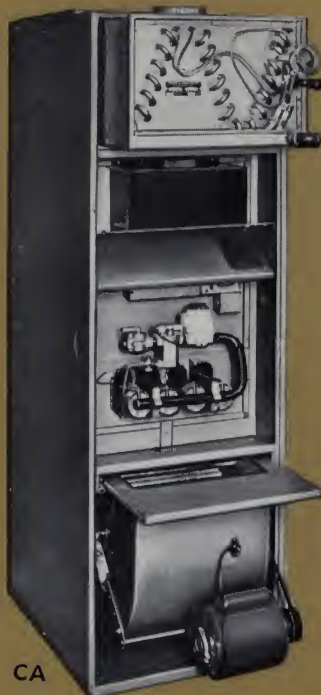


RA

BLOWER

The blowers are 13 $\frac{1}{8}$ " diameter, centrifugal, belt driven with variable speed pulleys, delivering large quantities of air at low-speed operation.

This provides adequate air for cooling and assures quiet operation.



CA

FURNACE

The furnace heat exchanger uses heating sections and burners of the superior "C" and "R" models but utilizes only as many sections as are required for the heat desired, leaving large by-pass areas for high volume air delivery at low internal resistance.

Heat exchangers seal in flue products with fully welded construction including secondary air opening and flue outlet. Furnace heat exchanger is of the updraft type with no pockets for collection of condensate.

Burners employ our patented "Control-aflame" grid which gives the burner a single short blue flame

on natural or L.P. gases. This burner is non-linting having passed many rigid lint tests.

EVAPORATOR

Evaporator Coils are standard up-flow "C" and downflow "R" which slide into the casing on runners. Immediate drainage of water from these coils prevents re-evaporation into the conditioned air. Expansion valves of proper capacity are installed on each evaporator. Condensate drains as well as liquid and suction connections are easily accessible.

SPECIFICATIONS

Upflow Size	Downflow Size	Heat Input MBH	Coil Nom. Tons	Cabinet Dim.			Ship. Wt.
				H	W	D	
60CA2	60RA2	60	2	67	15	27 $\frac{3}{4}$	210
80CA2	80RA2	80	2	67	15	27 $\frac{3}{4}$	210
80CA3	80RA3	80	3	67	21	27 $\frac{3}{4}$	251
100CA3	100RA3	100	3	67	21	27 $\frac{3}{4}$	266
125CA3	125RA3	125	3	67	21	27 $\frac{3}{4}$	285
100CA4	100RA4	100	4	67	27	27 $\frac{3}{4}$	335
125CA4	125RA4	125	4	67	27	27 $\frac{3}{4}$	350
150CA4	150RA4	150	4	67	27	27 $\frac{3}{4}$	365
175CA4	175RA4	175	5	67	27	27 $\frac{3}{4}$	372
125CA5	125RA5	125	5	67	33	27 $\frac{3}{4}$	377
150CA5	150RA5	150	5	67	33	27 $\frac{3}{4}$	392
175CA5	175RA5	175	5	67	33	27 $\frac{3}{4}$	407
200CA5	200RA5	200	5	67	33	27 $\frac{3}{4}$	422
*60CDA2	60RDA2	60	2	67	15	27 $\frac{3}{4}$	195
*80CDA2	80RDA2	80	2	67	15	27 $\frac{3}{4}$	195

* Direct drive blowers.

Manufactured by
FRASER-JOHNSTON CO.
SAN FRANCISCO, CALIF.



Fraser-Johnston

OVER A QUARTER CENTURY LEADERSHIP

THE ULTIMATE FURNACE WITH BUILT-IN EVAPORATOR CASING



MODELS CN & RN

FOR FUTURE ADDITION OF COOLING



RN

Designed for heating installations where future cooling is required or where high air delivery is desirable — Fraser & Johnston Co. offers the new models CN and RN.

These furnaces, sized to a wide variety of heating and cooling requirements, have space within the casing for a coil to be slid into place. To add cooling to the system it is necessary only to add a coil and connect it to a remote condensing unit.

BLOWERS

The blowers are 13 $\frac{1}{8}$ " diameter, centrifugal, belt driven with variable speed pulleys, delivering large quantities of air at low speed operation.

This provides adequate air for cooling but assures quiet operation.



CN

FURNACE

The furnace heat exchanger uses heating sections and burners of the superior "C" and "R" models but utilizes only as many sections as are required for the heat desired, leaving large by-pass areas for high volume air delivery at low internal resistance.

Heat exchangers seal in flue products with fully welded construction including secondary air opening and flue outlet. Furnace heat exchanger is of the updraft type with no pockets for the collecting of condensate.

Burners employ our patented "Control-aflame" grid which gives the burner a single short blue flame on natural or L.P. gases. This burner is non-linting having passed many rigid lint tests.

EVAPORATOR COIL ENCLOSURE

Within the casing of the furnace is an area where a coil of proper size may be slid into place at a later date to give year around air conditioning.

SPECIFICATIONS

Upflow Size	Downflow Size	Heat Input MBH	For Coil Nom. Tons	Cabinet Dim.			Ship. Wt.
				H	W	D	
Belt Drive Blowers							
60CN2	60RN2	60	2	67	15	27¾	182
80CN2	80RN2	80	2	67	15	27¾	182
80CN3	80RN3	80	3	67	21	27¾	213
100CN3	100RN3	100	3	67	21	27¾	228
125CN3	125RN3	125	3	67	21	27¾	247
100CN4	100RN4	100	4	67	27	27¾	288
125CN4	125RN4	125	4	67	27	27¾	303
150CN4	150RN4	150	4	67	27	27¾	313
175CN4	175RN4	175	4	67	27	27¾	318
125CN5	125RN5	125	5	67	33	27¾	321
150CN5	150RN5	150	5	67	33	27¾	336
175CN5	175RN5	175	5	67	33	27¾	351
200CN5	200RN5	200	5	67	33	27¾	366
Direct Drive Blowers							
60CDN2	60RDN2	60	2	67	15	27¾	167
80CDN2	80RDN2	80	2	67	15	27¾	167
*80CDN3	80RDN3	80	3	67	21	27¾	273
*100CDN3	100RDN3	100	3	67	21	27¾	388
*125CDN3	125RDN3	125	3	67	21	27¾	303

*When coil is added Belt Drive Blower must be substituted for Direct Drive Blower.

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OVER A QUARTER CENTURY LEADERSHIP

THE ULTIMATE SELF CONTAINED AIR-TO-AIR AIR CONDITIONERS AND HEAT PUMPS

28b

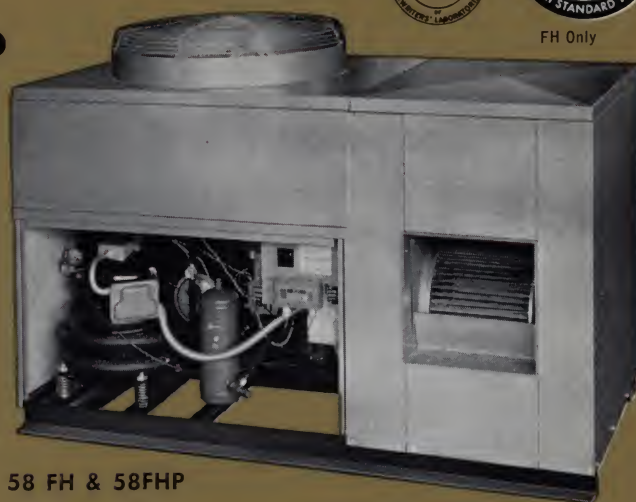
FR



FH Only

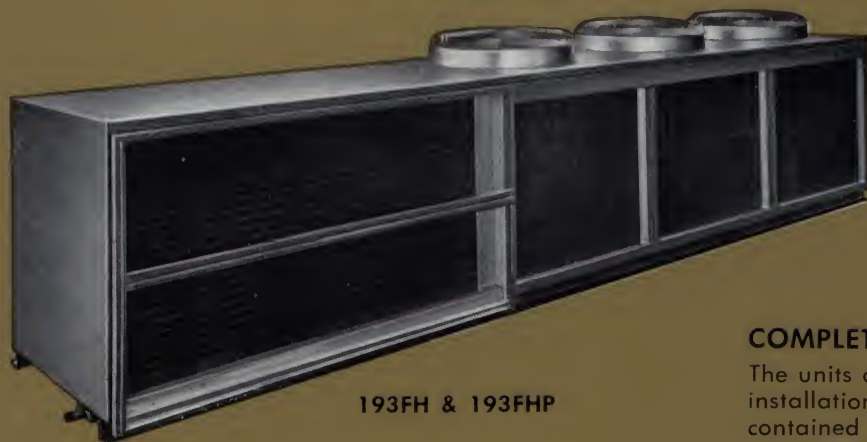
MODEL FH & FHP

To satisfy the ever-increasing demand for year-around commercial and industrial air conditioning, Fraser-Johnston now offers a complete line of self-contained, air-to-air, air conditioners and heat pumps. These units are designed to cool in areas of high ambient and the heat pumps to heat in areas of moderate winter climate. They feature large coil surfaces and high volume air delivery. The rugged construction and liberal use of protective devices assure long trouble-free operation. Auxiliary electric heat available if required.



58 FH & 58FHP

COMPARE THESE QUALITY FEATURES



193FH & 193FHP

HIGH AMBIENT OPERATION

These superior units are efficient at ambients up to 125° F. because of the large fans, and large coil areas. The fans, 24" and 30", are direct-driven on sizes through 4 tons and belt-driven 5 tons and above. The outdoor coils, with three rows of 1/2" copper tubing and 12 fins to the inch, have two square feet of face area and use 1200 cfm of air per ton.

COMPLETELY WEATHERPROOFED

The units are not only U.L. approved for outdoor installation but all components are internally contained in housings, weatherproofed against wind and rain and ventilated with outside air.

ELECTRICAL PANEL FOR EASY ACCESS

All electrical controls as well as the high and low pressure switches are completely wired and contained in a single panel for easy access. Serviceable while in operation.

Best Operating and Protective Devices

Full thermostatic expansion valve operation on all models.

Heat pumps have two expansion valves and driers located in the check valve bypasses.

All motors have electrical protection.

Compressors are further protected with high and low pressure switches as well as positive contact, delay type start and stop.

Heat pumps use an air pressure diaphragm type defrost initiating control with condensing temperature sensitive control to terminate defrost cycle.

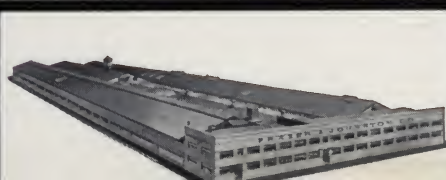
Standard manufacturer's warranty as reproduced on last page of our catalog.

Size	FH	FHP		Cabinet Dim.			Ship. Wt.
	Cool† MBH	Heat* MBH	Cool† MBH	H	W	D	
35FH & FHP	35	35	34	28 1/2	65	32	662
48FH & FHP	49	47	47	34 1/4	74	32	870
58FH & FHP	61	61	59	42 3/4	73	40	1131
86FH & FHP	88	85	83	42 3/4	105	40	1492
112FH & FHP	117	112	111	42 3/4	140	40	1820
193FH & FHP	182	184	178	42 3/4	204	40	2800

* Heating capacities based on 70° air entering indoor coil and 45° air entering outdoor coil. A.R.I. does not yet rate heat pumps.

† Cooling capacities at A.R.I. conditions: 80 DB 67° WB air to indoor coil and 95° ambient air to outdoor coil.

Manufactured by
FRASER-JOHNSTON CO.
SAN FRANCISCO, CALIF.



Fraser-Johnston

OVER A QUARTER CENTURY LEADERSHIP

THE ULTIMATE REMOTE AIR-TO-AIR HEAT PUMPS



MODEL FP & HB-P

Fraser & Johnston Co. now offers for the Commercial and Industrial market a complete line of remote heat pumps. These units are designed to cool in areas of high ambient and to heat in areas of moderate winter climate. They feature large coil surfaces and high volume air delivery. The rugged construction and liberal use of protective devices assure long trouble-free operation. Auxilliary electric heat is available if required.



35FP

MODEL FP (OUTDOOR UNIT)

HIGH AMBIENT OPERATION

These superior units are efficient at ambients up to 125° F. because of the large fans and large coil areas. The fans, 24" and 30", are direct driven on sizes through 4 tons and belt driven 5 tons and above. The outdoor coils, with three rows of 1/2" copper tubing and 12 fins to the inch, have two square feet of face area and use 1200 cfm of air per ton.

COMPLETELY WEATHERPROOFED

These units are not only U.L. approved for outdoor installation but all components are internally contained in housings, weatherproofed against wind and rain and still ventilated with outside air.

ELECTRICAL PANEL FOR EASY ACCESS

All electrical controls as well as the high and low pressure switches are completely wired and contained in a single panel for easy access. Serviceable while in operation.

EXPANSION VALVE

An expansion valve and drier are installed in a bypass of the check valve for use on the heating cycle.

BEST OPERATING AND PROTECTIVE DEVICES

All motors are electrically protected. Compressors are further protected with high and low pressure switches as well as positive contact, delay type start and stop. These units use an air pressure diaphragm type defrost initiating control with condensing temperature sensitive control to terminate defrost cycle.



HB33P
with double deflecting discharge
register assembly

MODEL HB-P (INDOOR UNIT)

WEATHER PROOFING

HB-P sizes up through 5 tons are not weatherproofed and must be installed under roof. They have 1/2" pipe flanges built into top for easy hanging.

HB-P sizes above 5 tons are weatherproofed and may be installed outdoors. They are supported on base rails.

EXPANSION VALVE

An expansion valve and drier are installed in the check valve bypass to be used on the cooling cycle.

LARGE CENTRIFUGAL BLOWER

Large centrifugal blowers are used on this indoor unit for quiet, efficient air circulation.

INDOOR UNIT					COMBINED PERFORMANCE		OUTDOOR UNIT				
Size	Cabinet Dim.			Ship. Weight	Heat* MBH	Cool† MBH	Size	Cabinet Dim.			Ship. Weight
	H	W	D					H	W	D	
HB33P	22½	32	32	160	35	34	35FP	28½	40	32	400
HB44P	22½	42	32	208	47	47	48FP	34½	46	32	525
HB55P	22½	51	32	270	61	59	58FP	42¾	45	40	750
HB80P	42¾	40	40	580	85	83	86FP	42¾	67	40	1060
HB110P	42¾	52	40	632	112	111	112FP	42¾	92	40	1500
HB165P	42¾	76	40	705	184	178	193FP	42¾	141	40	1900

* Heating capacities based on 70° air entering indoor coil and 45° air entering outdoor coil. A.R.I. does not yet rate heat pumps.

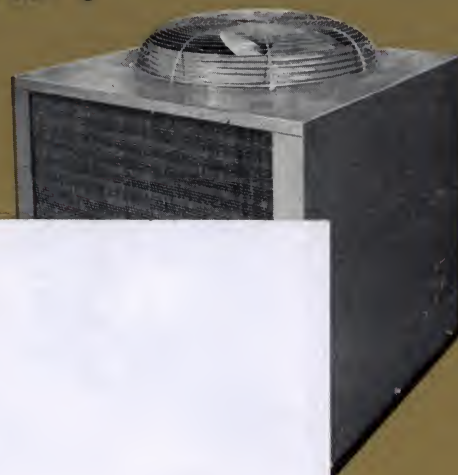
† Cooling capacities at A.R.I. conditions: 80°DB67°WB air to indoor coil and 95° ambient air to outdoor coil.

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OVER A QUARTER CENTURY LEADERSHIP

THE ULTIMATE REMOTE AIR-TO-AIR HEAT PUMPS



MODEL FP & HB-P

Fraser & Johnston Co. now offers for the Commercial and Industrial markets a new line of remote heat pumps to cool in areas where there are no areas of moderate temperature. The rugged protective design for operation. Available if required.

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MODEL

WEATHER PRO

HB-P sizes up to 1000 and must be installed in flanges built into the wall. HB-P sizes above 1000 must be installed outside.

EXPANSION

An expansion valve bypass to the indoor coil.

LARGE CENTRIFUGAL

Large centrifugal fans for quiet, efficient operation.

INDOOR

Mike Jackson, FAIA													Ship. Weight
Size	H												
HB33P	22½	42	32	208	47	47	48FP	34½	46	32	400		
HB44P	22½	51	32	270	61	59	58FP	42¾	45	40	525		
HB55P	22½	40	40	580	85	83	86FP	42¾	67	40	750		
HB80P	42¾	52	40	632	112	111	112FP	42¾	92	40	1060		
HB110P	42¾	76	40	705	184	178	193FP	42¾	141	40	1500		
HB165P											1900		

* Heating capacities based on 70° air entering indoor coil and 45° air entering outdoor coil. A.R.I. does not yet rate heat pumps.
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